

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 December 2003 (04.12.2003)

PCT

Rec'd PCT/PTO 10 SEP 2004



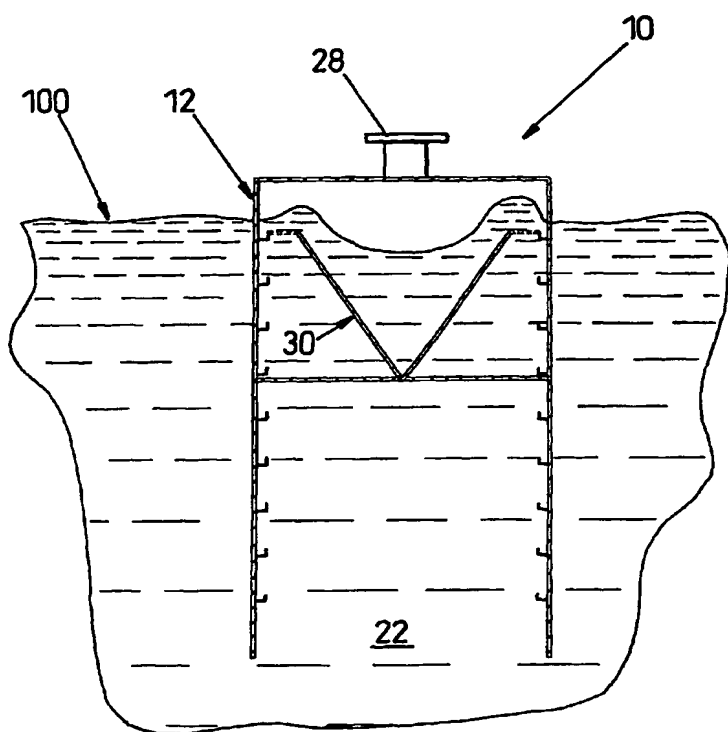
10/507428

(10) International Publication Number
WO 2003/099646 A3

- (51) International Patent Classification⁷: B63B 21/26, 21/27, 21/29 (74) Agent: FITZPATRICKS; 4 West Regent Street, Glasgow G2 1RS (GB).
- (21) International Application Number: PCT/EP2003/006338 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 22 May 2003 (22.05.2003) (25) Filing Language: English (26) Publication Language: English
- (30) Priority Data: 0212003.8 24 May 2002 (24.05.2002) GB (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
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[Continued on next page]

(54) Title: SEABED ANCHOR



(57) Abstract: A suction anchor (10) comprising a caisson (12) with side wall (14), open bottom (22) and closed top (26) that define the interior volume of the caisson. When the anchor is placed on a seabed (100) of fluent mud, a top connector (28) allows temporary connection of a pump (200) to suck seabed mud (102) through the open bottom into the caisson's interior, the bottom edge (20) of the caisson wall (14) allowing the anchor to cut into, and become embedded within the seabed (100). To increase resistance of the embedded anchor (10) from being withdrawn, the caisson is internally fitted with a seabed soil retaining means (30) that receives and retains mud during anchor embedment. The seabed soil retaining means comprises an open-topped container secured within the caisson, the open top (38) being located just below the caisson's closed top (26). By forming the container wall (36) as a downwardly convergent cone, the passage (102) of mud upwardly past the outside of the container (30) during embedment of the anchor is minimally impeded. As well as improving the stability and performance of suction anchors, the invention can also be applied to similarly improving the stability and performance of embeddable gravity bases or to seabed anchors embedded by downwardly directed dynamic mechanical forces, rather than

by suction. The anchors can be embedded vertically or non-vertically.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/06338

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B63B21/26 B63B21/27 B63B21/29

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 B63B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 257 721 A (HAYNES HARVEY H) 24 March 1981 (1981-03-24) column 2, line 46 -column 3, line 23 column 4, line 30-39 figures 1,2	1-4,6, 8-11
A	US 4 572 304 A (MAHAR LARRY J ET AL) 25 February 1986 (1986-02-25) column 3, line 28 -column 4, line 3; figures 7,8	1-3, 8-10, 12-14
A	US 4 575 282 A (PARDUE JR JAMES H ET AL) 11 March 1986 (1986-03-11) column 19, line 45; figure 3 -/--	1-6, 8-10, 12-14

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

10 November 2003

Date of mailing of the international search report

02/12/2003

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/06338

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 4 095 550 A (KERR NEIL) 20 June 1978 (1978-06-20) column 1, line 45-54; claim 4 -----	1,3,5,8, 10

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Information on patent family members

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